Express Mail No. EV 678 762 514 US

Application No. 10/732,747

Reply to Office action of 03 August 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 - 22 (Cancelled).

Claim 23 (New): A control system configured to execute at least one computer readable instruction for controlling the operation of an adjustable covering for an architectural opening, by:

receiving a first signal from a remote control having an up button and a down button and whereby the first signal is generated upon a single press and release of the down button;

outputting a second signal which activates a motor to begin extending the adjustable covering;

during extension of the adjustable covering, receiving at least one of a third signal or the first signal indicating a single press and release, respectively, of one of the up button and the down button;

outputting a fourth signal which deactivates the motor; and

upon receiving the first signal, activating the motor to continue extending the adjustable covering until it is fully extended;

wherein the adjustable covering is mounted to a roll bar comprising a forward extending rib; and

whereby the adjustable covering is fully extended upon the forward extending rib coming into contact with a working half, pivotally attached to a mounting half of a limit stop.

Claim 24 (New): The control system of claim 23, wherein the adjustable covering comprises a first flexible sheet, a second flexible sheet, and a plurality of adjustable vanes attached between the first and second flexible sheets to regulate the transmissivity of the adjustable covering, and wherein the first and second flexible sheets are mounted on the roll bar drivingly engaged with the motor.

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Claim 25 (New) The control system of claim 24, wherein control of the operation of the adjustable covering further comprises:

outputting the fourth signal deactivating the motor after the adjustable covering reaches full extension and while the adjustable vanes are in a minimum transmissivity configuration;

receiving the third signal after outputting the fourth signal; and

outputting the second signal, activating the motor to begin rotating the roll bar to increase the transmissivity, until a maximum transmissivity configuration is obtained.

Claim 26 (New): The control system of claim 24, wherein control of the operation of the adjustable covering further comprises:

deactivating the motor after the adjustable covering reaches full extension and while the adjustable vanes are in a minimum transmissivity configuration;

receiving the first signal and activating the motor to begin rotating the roll bar to increase the transmissivity;

during an increase of the transmissivity, receiving at least one of the first signal and the third signal; and

outputting the fourth signal, whereupon outputting the fourth signal the motor is deactivated and the transmissivity stops increasing.

Claim 27 (New): A control system configured to execute at least one computer readable instruction, in response to one or more signals received from a wireless remote control having an up button and a down button, and output signals to remotely activate a motor and thereby control the configuration of an adjustable covering for an architectural opening starting from a fully extended configuration of the adjustable covering, the computer readable instructions comprising:

monitoring a signal from the remote control for activation of the up button;

upon recognizing a single press and release of the up button, activating the motor to begin retracting the adjustable covering;

continuing to retract the adjustable covering until it is fully retracted;

during retraction of the adjustable covering, monitoring a signal from the remote control for activation of one of the up button and the down button;

deactivating the motor after detecting a single press and release of one of the up button and the down button;

upon recognizing a single press and release of the up button, activating the motor to continue retracting the adjustable covering until it is fully retracted;

wherein the adjustable covering includes a bottom rail and the adjustable covering is fully retracted upon the bottom rail coming into contact with a working half pivotally attached to a mounting half of a limit stop.

Claim 28 (New): A control system comprising: a processor adapted to execute at least one computer readable instruction to adjust the configuration of a window covering, by:

detecting a signal indicative of a desired adjustment of a window covering; activating a motor until the window covering is in a minimally transmissive configuration;

while the motor is activated, detecting a signal indicative of a second desired adjustment of the window covering;

deactivating the motor upon detection of the signal indicative of the second desired adjustment;

detecting a signal indicative of third desired adjustment of the window covering; upon detection of the signal indicative of the third desired adjustment of the window covering, activating the motor until the adjustable covering obtains a minimally transmissive configuration;

sensing when the window covering reaches a minimally transmissive configuration by:

detecting contact between a forward extending rib and a working half attached to
the window covering, wherein the working half is pivotally attached to a mounting half of a limit
stop; and

deactivating the motor upon sensing the window covering reaching a minimally transmissive configuration.

Claim 29 (New) The control system of claim 28, wherein the signal indicative of a desired adjustment to the window covering comprises a single press and release of an up button.

Express Mail No. EV 678 762 514 US

Application No. 10/732,747

Reply to Office action of 03 August 2005

Claim 30 (New) The control system of claim 29, wherein the up button is provided by a wireless remote control.

Claim 31 (New) The control system of claim 28, wherein the signal indicative of the second desired adjustment of the window covering comprises a press and release of one of the up button and a down button.

Claim 32 (New) The control system of claim 28, wherein the signal indicative the third desired adjustment of the window covering comprises a press and release of the up button.

Claim 33 (New) The control system of claim 28, wherein the control system is adapted to control a window covering further comprising:

a first flexible sheet;

a second flexible sheet;

a plurality of adjustable vanes attached between the first and second flexible sheets; and a roll bar drivingly engaged with the motor, and adapted for mounting of the first and second flexible sheets;

whereupon the activation of the motor, under the control of the operating system, the transmissivity of the adjustable covering can be adjusted.

Claim 34 (New) The control system of claim 33, wherein extension of the window covering can be adjusted under the control of the operating system.

Claim 35 (New) The control system of claim 28, wherein extension and retraction of the window covering can be adjusted under the control of the operating system.

Claim 36 (New) The control system of claim 28, further comprising:

detecting a signal indicative of a fourth desired adjustment of the window covering; and
upon detecting the signal indicative of a fourth desired adjustment of the window
covering, activating the motor.

Claim 37 (New) The control system of claim 36, further comprising: detecting contact between a bottom rail of the window covering and a working half

pivotally attached to a mounting half of a limit stop; and upon detecting the contact, deactivating the motor.

Claim 38 (New) The control system of claim 36, wherein the signal indicative of a fourth desired adjustment of the window covering is detected prior to at least one of the signal, the second signal, and the third signal.

Claim 39 (New) The control system of claim 37 wherein the signal indicative of a fourth desired adjustment of the window covering comprises a press and release of the up button.

Claim 40 (New) The control system of claim 36, wherein upon detecting the contact, the window covering is in a fully retracted configuration.

Claim 41 (New) The control system of claim 36, further comprising:

detecting a signal indicative of a fifth desired adjustment of the window covering, wherein the signal is detected upon the activation of at least one of an up button and a down button; and

upon detection of the signal, deactivating the motor.

Claim 42 (New) The control system of claim 41, wherein the same signal is detected based upon an activation of the up button for each of the desired adjustment, the second desired adjustment, the third desired adjustment, the fourth desired adjustment and the fifth desired adjustment.

Claim 43 (New) The control system of claim 41, wherein the signal detected based upon an activation of the up button for the desired adjustment is identical to the signal detected based upon an activation of the up button for the fifth desired adjustment.

Claim 44 (New) A method of using a control system to receive signals from a wireless remote control having an up button and a down button and remotely activate a motor to adjust a configuration of an adjustable covering for an architectural opening, wherein the configuration is variably adjustable between a fully extended configuration and a fully retracted configuration, and, when the adjustable covering is in the fully extended configuration, the configuration is

Express Mail No. EV 678 762 514 US Application No. 10/732,747

Reply to Office action of 03 August 2005

variably adjustable between a maximum transmissivity configuration and a minimum transmissivity configuration, comprising:

monitoring an amount of extension of the adjustable covering;

the monitoring further comprising detecting full extension when contact occurs between an extending rib and a member of a limit stop;

monitoring an amount of transmissivity of the adjustable covering;

monitoring a speed of the adjustable covering;

detecting a signal from the remote control for an indication of a pressing of one of the up button and the down button; and

commanding the motor to make a determined adjustment to the adjustable covering upon detecting the signal from the remote control, wherein the determined adjustment is based upon at least one of the monitored amount of extension, the monitored amount of transmissivity, the monitored speed, and the detected signal.

Claim 45 (New): The method of claim 44, wherein when the monitored amount of extension is fully extended, the monitored amount of transmissivity is maximum transmissivity, the monitored speed of the adjustable covering is zero, and the monitored signal from the remote control is recognized as pressing of the up button, the commanding step comprises commanding the motor to reduce the amount of transmissivity of the covering.

Claim 46 (New): The method of claim 44, wherein when the monitored amount of extension is fully extended, the monitored amount of transmissivity is minimum transmissivity, the monitored speed of the adjustable covering is zero, and the monitored signal from the remote control is recognized as pressing of the up button, the commanding step comprises commanding the motor to reduce the amount of extension of the covering.

Claim 47 (New): The method of claim 44, wherein when the monitored amount of extension is fully extended, the monitored amount of transmissivity is minimum transmissivity, the monitored speed of the adjustable covering is zero, and the monitored signal from the remote control is recognized as pressing of the down button, the commanding step comprises commanding the motor to increase the amount of transmissivity of the covering.

Claim 48 (New): The method of claim 44, wherein when the monitored amount of extension is fully extended, the monitored amount of transmissivity is between minimum transmissivity and maximum transmissivity, the monitored speed of the adjustable covering is nonzero, the monitored signal from the remote control is recognized as pressing of one of the up button and the down button, and the commanding step comprises commanding the motor to stop.

Claim 49 (New): The method of claim 44, wherein when the monitored amount of extension is fully extended, the monitored amount of transmissivity is between minimum transmissivity and maximum transmissivity, the monitored speed of the adjustable covering is zero, the monitored signal from the remote control is recognized as pressing of the up button, and the commanding step comprises commanding the motor to reduce the amount of transmissivity of the covering.

Claim 50 (New): The method of claim 44, wherein when the monitored amount of extension is fully extended, the monitored amount of transmissivity is between minimum transmissivity and maximum transmissivity, the monitored speed of the adjustable covering is zero, the monitored signal from the remote control is recognized as pressing of the down button, and the commanding step comprises commanding the motor to increase the amount of transmissivity of the covering.

Claim 51 (New): The method of claim 44, wherein when the monitored amount of extension is fully retracted, the monitored amount of transmissivity is minimum transmissivity, the monitored speed of the adjustable covering is zero, the monitored signal from the remote control is recognized as a single pressing and release of the down button, and the commanding step comprises commanding the motor to increase the amount of extension of the covering.

Claim 52 (New): The method of claim 44, wherein when the monitored amount of extension is between fully retracted and fully extended, the monitored amount of transmissivity is minimum transmissivity, the monitored speed of the adjustable covering is nonzero, the monitored signal from the remote control is recognized as a pressing of one of the up button and the down button, and the commanding step comprises commanding the motor to stop.

Claim 53 (New): The method of claim 44, wherein when the monitored amount of extension is between fully retracted and fully extended, the monitored amount of transmissivity is minimum transmissivity, the monitored speed of the adjustable covering is zero, the monitored signal from the remote control is recognized as a selection of the up button, and the commanding step comprises commanding the motor to reduce the amount of extension of the covering.

Claim 54 (New): The method of claim 44, wherein when the monitored amount of extension is between fully retracted and fully extended, the monitored amount of transmissivity is minimum transmissivity, the monitored speed of the adjustable covering is zero, the monitored signal from the remote control is recognized as a selection of the down button, and the commanding step comprises commanding the motor to increase the amount of extension of the covering.

Claim 55 (New) The method of claim 44, wherein the control system simultaneously monitors the transmissivity of the adjustable covering and the speed of the adjustable covering.

Claim 56 (New) The method of claim 44, wherein the control system further determines the speed of the adjustable covering and the transmissivity of the adjustable covering.

Claim 57 (New) The method of claim 56, wherein the speed determination occurs prior to the transmissivity determination.

Claim 58 (New) The method of claim 44, wherein the determined adjustment is predetermined.

Claim 59 (New): A method of using a control system adapted to receive at least one signal to activate a motor to adjust a configuration of an adjustable covering, wherein the configuration is variably adjustable between a fully extended configuration and a fully retracted configuration, and, when the adjustable covering is in the fully extended configuration, the configuration is variably adjustable between a maximum transmissivity configuration and a minimum transmissivity configuration, wherein each press of a manual operating switch is alternatingly treated as an up request followed by a down request, comprising:

detecting a depth of the adjustable covering;

wherein the adjustable covering is mounted to a roll bar comprising a forward extending rib; whereby the adjustable covering is fully extended upon the forward extending rib coming into contact with a working half, pivotally attached to a mounting half of a limit stop;

detecting an amount of transmissivity of the adjustable covering;

detecting a speed of the adjustable covering;

monitoring a signal for an indication of one of an up request and a down request; and instructing the motor to make an adjustment to the adjustable covering upon recognizing the signal, wherein the adjustment is based upon the detected depth, the monitored amount of transmissivity, the monitored speed, and the monitored signal.

Claim 60 (New): The method of any one of claims 44-59, further comprising instructing the motor to operate at a first speed when adjusting the amount of extension of the covering.

Claim 61 (New): The method of any one of claims 44-59, wherein when the adjustable covering is fully extended and the adjustment consists of adjusting the amount of transmissivity of the covering, the motor operates in a second speed that is slower than the first speed.

Claim 62 (New): The method of any one of claims 44-59, further comprising the steps of monitoring the motor for a stalled condition, and when a stalled condition occurs, commanding the motor to stop; and determining a configuration of the adjustable covering based upon the monitored amount of extension of the adjustable covering.

Claim 63 (New): The control system of any of claims 23-43, wherein the control system controls the operation of the window covering using a processor having embedded firmware.